

Sequence Listing PB60024.ST25.txt
SEQUENCE LISTING

<110> Glaxo Group Limited

<120> Anti-MAG Antibodies

<130> PB60024

<140> 10/550,363

<141> 2004-02-02

<160> 17

<170> PatentIn version 3.3

<210> 1

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Light chain Complementarity Determining Region according to Kabat

<400> 1

Lys Ser Ser His Ser Val Leu Tyr Ser Ser Asn Gln Lys Asn Tyr Leu
1 5 10 15

Ala

<210> 2

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Light chain Complementarity Determining Region according to Kabat

<400> 2

Trp Ala Ser Thr Arg Glu Ser
1 5

<210> 3

<211> 8

<212> PRT

<213> Artificial

<220>

<223> Light chain Complementarity Determining Region according to Kabat

<400> 3

His Gln Tyr Leu Ser Ser Leu Thr
1 5

<210> 4

<211> 5

Sequence Listing PB60024.ST25.txt

<212> PRT
<213> Artificial

<220>
<223> Heavy chain Complementarity Determining Region according to Kabat
<400> 4

Asn Tyr Gly Met Asn
1 5

<210> 5
<211> 17
<212> PRT
<213> Artificial

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<223> Heavy chain Complementarity Determining Region according to Kabat
<400> 5

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe Thr
1 5 10 15

Gly

<210> 6
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<223> Heavy chain Complementarity Determining Region according to Kabat
<400> 6

Asn Pro Ile Asn Tyr Tyr Gly Ile Asn Tyr Glu Gly Tyr Val Met Asp
1 5 10 15

Tyr

<210> 7
<211> 475
<212> PRT
<213> Artificial

<220>
<223> Mouse/human chimeric anti-MAG antibody heavy chain
<400> 7

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

Val His Ser Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys
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20

25

30

Pro Gly Glu Thr Asn Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

Thr Asn Tyr Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu
50 55 60

Lys Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala
65 70 75 80

Asp Asp Phe Thr Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser
85 90 95

Thr Ala Tyr Leu Gln Ile Ser Asn Leu Lys Asn Glu Asp Thr Ala Thr
100 105 110

Tyr Phe Cys Ala Arg Asn Pro Ile Asn Tyr Tyr Gly Ile Asn Tyr Glu
115 120 125

Gly Tyr Val Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
130 135 140

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
145 150 155 160

Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
165 170 175

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
180 185 190

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
195 200 205

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
210 215 220

Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
225 230 235 240

Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
245 250 255

Cys Pro Ala Pro Glu Leu Ala Gly Ala Pro Ser Val Phe Leu Phe Pro
260 265 270

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Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
275 280 285

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
290 295 300

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
305 310 315 320

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
325 330 335

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
340 345 350

Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
355 360 365

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
370 375 380

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
385 390 395 400

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
405 410 415

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
420 425 430

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
435 440 445

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
450 455 460

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
465 470 475

<210> 8
<211> 238
<212> PRT
<213> Artificial

<220>
<223> Mouse/human chimeric anti-MAG antibody light chain

<400> 8

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
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1           5           10           15
Val His Ser Asn Ile Met Met Thr Gln Ser Pro Ser Ser Leu Ala Val
           20           25           30
Ser Ala Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser His Ser Val
           35           40           45
Leu Tyr Ser Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys
           50           55           60
Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu
           65           70           75           80
Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe
           85           90           95
Thr Leu Thr Ile Ile Asn Val His Thr Glu Asp Leu Ala Val Tyr Tyr
           100          105          110
Cys His Gln Tyr Leu Ser Ser Leu Thr Phe Gly Thr Gly Thr Lys Leu
           115          120          125
Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro
           130          135          140
Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
           145          150          155          160
Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
           165          170          175
Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
           180          185          190
Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
           195          200          205
Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly
           210          215          220
Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
           225          230          235

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<210> 9
<211> 475
<212> PRT
<213> Artificial

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Sequence Listing PB60024.ST25.txt

<220>

<223> Mouse/human chimeric anti-MAG antibody heavy chain

<400> 9

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

Val His Ser Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys
20 25 30

Pro Gly Glu Thr Asn Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

Thr Asn Tyr Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu
50 55 60

Lys Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala
65 70 75 80

Asp Asp Phe Thr Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser
85 90 95

Thr Ala Tyr Leu Gln Ile Ser Asn Leu Lys Asn Glu Asp Thr Ala Thr
100 105 110

Tyr Phe Cys Ala Arg Asn Pro Ile Asn Tyr Tyr Gly Ile Asn Tyr Glu
115 120 125

Gly Tyr Val Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
130 135 140

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
145 150 155 160

Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
165 170 175

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
180 185 190

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
195 200 205

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
210 215 220

Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
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225					230					235						240
Lys	Lys	Val	Glu	Pro 245	Lys	Ser	Cys	Asp	Lys 250	Thr	His	Thr	Cys	Pro 255	Pro	
Cys	Pro	Ala	Pro 260	Glu	Leu	Leu	Gly	Gly 265	Pro	Ser	Val	Phe	Leu 270	Phe	Pro	
Pro	Lys	Pro 275	Lys	Asp	Thr	Leu	Met 280	Ile	Ser	Arg	Thr	Pro 285	Glu	Val	Thr	
Cys	Val 290	Val	Val	Asp	Val	Ser 295	His	Glu	Asp	Pro	Glu 300	Val	Lys	Phe	Asn	
Trp 305	Tyr	Val	Asp	Gly	Val 310	Glu	Val	His	Asn	Ala 315	Lys	Thr	Lys	Pro	Arg 320	
Glu	Glu	Gln	Tyr	Asn 325	Ser	Thr	Tyr	Arg	Val 330	Val	Ser	Val	Leu	Thr 335	Val	
Leu	His	Gln	Asp 340	Trp	Leu	Asn	Gly	Lys 345	Glu	Tyr	Lys	Cys	Lys 350	Val	Ser	
Asn	Lys	Ala 355	Leu	Pro	Ala	Pro	Ile 360	Glu	Lys	Thr	Ile	Ser 365	Lys	Ala	Lys	
Gly	Gln 370	Pro	Arg	Glu	Pro	Gln 375	Val	Tyr	Thr	Leu	Pro 380	Pro	Ser	Arg	Asp	
Glu 385	Leu	Thr	Lys	Asn	Gln 390	Val	Ser	Leu	Thr	Cys 395	Leu	Val	Lys	Gly	Phe 400	
Tyr	Pro	Ser	Asp	Ile 405	Ala	Val	Glu	Trp	Glu 410	Ser	Asn	Gly	Gln	Pro 415	Glu	
Asn	Asn	Tyr	Lys 420	Thr	Thr	Pro	Pro	Val 425	Leu	Asp	Ser	Asp	Gly 430	Ser	Phe	
Phe	Leu	Tyr 435	Ser	Lys	Leu	Thr	Val 440	Asp	Lys	Ser	Arg	Trp 445	Gln	Gln	Gly	
Asn	Val 450	Phe	Ser	Cys	Ser	Val 455	Met	His	Glu	Ala	Leu 460	His	Asn	His	Tyr	
Thr 465	Gln	Lys	Ser	Leu	Ser 470	Leu	Ser	Pro	Gly	Lys 475						

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<210> 10
 <211> 126
 <212> PRT
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<220>
 <223> Anti-Mag antibody heavy chain variable region sequence

<400> 10

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
 50 55 60

Thr Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asn Pro Ile Asn Tyr Tyr Gly Ile Asn Tyr Glu Gly Tyr Val
 100 105 110

Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 11
 <211> 126
 <212> PRT
 <213> Artificial

<220>
 <223> Anti-MAG antibody heavy chain variable region sequence

<400> 11

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Sequence Listing PB60024.ST25.txt

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
50 55 60

Thr Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95

Ala Arg Asn Pro Ile Asn Tyr Tyr Gly Ile Asn Tyr Glu Gly Tyr Val
100 105 110

Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 12

<211> 126

<212> PRT

<213> Artificial

<220>

<223> Anti-MAG antibody heavy chain variable sequence

<400> 12

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
50 55 60

Thr Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Asn Pro Ile Asn Tyr Tyr Gly Ile Asn Tyr Glu Gly Tyr Val
100 105 110

Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

Sequence Listing PB60024.ST25.txt

<210> 13
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 <212> PRT
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<220>
 <223> Anti-MAG heavy chain variable sequence

<400> 13

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
 1 5 10 15

Ser Asn Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
 50 55 60

Thr Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Thr Tyr Phe Cys
 85 90 95

Ala Arg Asn Pro Ile Asn Tyr Tyr Gly Ile Asn Tyr Glu Gly Tyr Val
 100 105 110

Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

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 <212> PRT
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 <223> Anti-MAG light chain variable region sequence

<400> 14

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser His Ser Val Leu Tyr Ser
 20 25 30

Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

Sequence Listing PB60024.ST25.txt

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys His Gln
85 90 95

Tyr Leu Ser Ser Leu Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val
115

<210> 15
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<223> Anti-MAG light chain variable region sequence

<400> 15

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser His Ser Val Leu Tyr Ser
20 25 30

Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ile Asn Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys His Gln
85 90 95

Tyr Leu Ser Ser Leu Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val
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Sequence Listing PB60024.ST25.txt

<210> 16
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 <212> PRT
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 <223> Anti-MAG light chain variable region sequence

<400> 16

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser His Ser Val Leu Tyr Ser
 20 25 30

Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Ser Leu His Thr Glu Asp Val Ala Val Tyr Tyr Cys His Gln
 85 90 95

Tyr Leu Ser Ser Leu Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105 110

Arg Thr Val
 115

<210> 17
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 <212> PRT
 <213> Artificial

<220>
 <223> Anti-MAG antibody light chain variable region sequence

<400> 17

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser His Ser Val Leu Tyr Ser
 20 25 30

Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

Sequence Listing PB60024.ST25.txt

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ile Asn Leu His Thr Glu Asp Val Ala Val Tyr Tyr Cys His Gln
85 90 95

Tyr Leu Ser Ser Leu Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val
115